Bossut, Charles | Encyclopedia.com

(*b*. Tartars, Rhône-et-Loire, France, 11 August 1730; *d*. Paris, France, 14 January 1814)

mathematics, mechanics.

Bossut was the son of Barthélemy Bossut and Jeanne Thonnerine. His father died when Charles was six months of age, and the boy was raised by a paternal uncle. He entered the Jesuit Collège de Lyon at fourteen and was a student of Père Béraud, a mathematician whose pupils included Jean Étienne Montucla and Joseph Jérome Lalande. Bossut took minor ecclesiastical ordres and was an *abbé* until 1792. He was aided in his professional formation by d'Alembert, Clairaut, and the Abbé Charles Étienne Louis Camus. Bossut never married, was without family, and, according to some, lived his last years as a misanthrope.

Bossut's importance for the history of science lies in his role as a major contributor to European scientific education. His career began in 1752, when he was appointed as professor of mathematics at the École du Génie at Mézières. He remained as professor until 1768, then continued as examiner of students until 1794. His other teaching post was from 1775 to 1780, in the chair of hydrodynamics established by Turgot at the Louvre. For a time he was also examiner of students at the École Polytechnique. Bossut wrote a series of textbooks that appeared in several French and foreign-language editions and won wide acceptance from the 1770's until the early years of the Empire. The texts of Bossut and Étienne Bézout best represent the emergence in the eighteenth century of a standardized, rigorous system of engineering physics textbooks. In France, for example. Bossut's course was used at the Benedictine Collège de Sorèze, the Collège de France, the École du Génie, the École des Ponts et Chaussées, and the École des Mines. He also wrote a history of mathematics that achieved popularity, but never the scholarly recognition of Montucla's history. He edited the works of Pascal, contributed to the *Enchyalopédie méthoduque*, and aided d'Alembert in editing contributions to Diderot's *Encyclopédie*.

Bossut was one of a very few whom d'Alembert took as students, and as such he was admitted as a *correspondant* to the Académie des Sciences on 12 May 1753; subsequently, he rose to *géométre, mécanicien*, and *mathématicien*. In 1761, 1762, and 1765 he won or shared prizes given by the Academy for memoirs on mechanics applied to the operation of ships and on the resistance of the ether in planetary motions. He won additional prizes for his mechanics memoirs from the academies of Lyons and Toulouse, and was elected to the scientific academies of Bologna, Turin, and St. Petersburg. In 1775 he participated with d'Alembert and Condorcet in a well known series of experiments on fluid resistance. Never more than a minor mathematician or physicist, Bossut is nevertheless one of the important figures in the history of physics and engineering education.

BIBLIOGRAPHY

I. Original Works. Most of Bossut's memoirs appeared in the *Mémoires* and publications of the Académie des Sciences, Paris. Some of these were reissued in the collection *Mémoiresde mathématiques, concernant la navigation, Iastronomie physique, Ihistoire… par Charles Bossut* (Paris, 1812). His first textbook, a volume that does not figure in the catalogs of most major libraries, is *Traité élémentaire de méchanique et de dinamique appliqué principlement aux mouvemens des machines* (Charleville, 1763). The various editions of his textbooks (*Cours de mathématiques, Traité élémentaire d'arithmértique*, and others) are cited in the general catalogs of the Bibliotheque Nationale and the British Museum. The first edition of his history of mathematics is *Essai sur l'histoire générale des mathématiques*, 2 vols. (Paris, 1802), For Bossut's edition of Pascal's works see Blaise Pascal, *Oeuvres complètes*, **5** vols. (The Hague, 1779).

II. Secondary Literature. For a short biography, see M.E. Doublet, "L'abbé Bossut," in *Bulletin des sciences mathématiques*, 2nd ser., **38** (1914), 93–96, 121–125, 158–160, 186–190, 220–224. See also the *éloge* by J.B.J. Delambre in *Mémoiresde l'Académie Royale des Sciences de l'Institute de France—Anne 1816*, **1** (1818), xci-cii. For Bossut's career at Méziéres and for his general influence on education, see Rané Taton, ed., *Enseignement et diffusion des sciences en France au XVIII^e siècle* (Paris, 1964); Vol. XI of the series Historire de la Pensée. Bossut's appointment to the chair of hydrodynamics is discussed in Roger Hahn, "The Chair of Hydrodynamics in Paris, 1775–1791; A Creation of Turgot," in *Acts of the Xth International Congress of the History of Science (Ithaca)* (Paris, 1964), pp. 751–754. A convenient summary of Bossut's work in fluid resistance is in René Dugas, *A History of Mechanics*, J. R. Maddox, trans. (Neuchâtel, 1955), pp. 313–316. On the question of whether Bossut was a Jesuit, see Thomas F. Mulcrone, S.J., "A Note on the Mathematician Abbé Charles Bossut," in *Bulletin—American Association of Jesuit Scientists*, **42** (1965), 16–19.

C. Stewart Gillmor